

Amendments to the Claims:

1. (Currently Amended) A touchpad comprising a plurality of spaced apart conductors located across the plane of a supporting medium and an electrically conductive medium located in a plane that is substantially paralld to the plane of the supporting medium, wherein said a supporting medium ~~supports~~ ~~supporting~~ a said plurality of spaced apart conductors wherein ~~in which~~ there is no electrical contact between ~~the~~ said plurality of spaced apart conductors, each of said conductors ~~conductor~~ being sensitive to the proximity of a finger to modify the capacitance of said conductor to detect the presence of the ~~said~~ finger positioned close to said ~~that~~ conductor, ~~said the touchpad further comprising an~~ electrically conductive medium being proximal to said plurality of spaced apart conductors to concentrate the electric field between said plurality of spaced apart conductors towards the plane of said ~~the~~ supporting medium and adapted to locally modify the capacitive environment between a subset of said plurality of spaced apart ~~the~~ conductors without distortion of said ~~the~~ conductive medium.

2. - 3. (Cancelled)

4. (Currently Amended) The touchpad as claimed in claim 1, wherein said ~~the~~ electrically conductive medium is adapted to accentuate the variation in capacitance of a conductor and to control the dispersion of a resulting capacitive signal propagating from substantially the proximity of the ~~said~~ finger.

5. (Currently Amended) The touchpad as claimed in claim 1, wherein said the supporting medium is electrically insulating.

6. (Currently Amended) The touchpad as claimed in claim 1, wherein said the conductive medium is in the form of a conductive layer covering at least a portion of said the supporting medium.

7. (Currently Amended) The touchpad as claimed in claim 6, wherein said the conductive layer is discontinuous.

8. (Currently Amended) The touchpad as claimed in claim 6, wherein said the conductive layer is selectively supported by a first surface of said the supporting medium or a first surface of a dielectric medium.

9. (Currently Amended) The touchpad as claimed in claim 8, wherein said the dielectric medium has a thickness which is relatively large as compared to the thickness of said the conductive layer.

10. (Currently Amended) The touchpad as claimed in claim 6, further comprising a non-conductive layer proximate to said the conductive layer.

11. (Currently Amended) The touchpad as claimed in claim 8, wherein said ~~the~~ supporting medium and said ~~the~~ conductive layer are separated by said ~~the~~ dielectric medium.

12. (Currently Amended) The touchpad as claimed in claim 8, wherein said ~~the~~ conductive layer is sandwiched between said ~~the~~ supporting medium and said ~~the~~ dielectric medium.

13. (Currently Amended) The touchpad as claimed in claim 8, wherein said ~~the~~ supporting medium is sandwiched between said ~~the~~ conductive layer and said ~~the~~ dielectric medium.

14. (Currently Amended) The touchpad as claimed in claim 8, comprising a further conductive layer proximate to said ~~the~~ dielectric medium and sandwiching said ~~the~~ dielectric medium between said ~~the~~ further conductive layer and said ~~the~~ conductive layer.

15. (Currently Amended) The touchpad as claimed in claim 1, wherein said ~~the~~ conductive medium has a resistivity in the range of 100 ohms per square to 10,000,000 ohms per square.

16. (Currently Amended) The touchpad as claimed in claim 1, wherein said the conductive medium electrically floats or is grounded to earth.
17. (Currently Amended) The touchpad as claimed in claim 16, wherein said the conductive medium is selectively grounded by a wire or a resistor.
18. (Currently Amended) The touchpad as claimed in claim 6, wherein said the conductive layer comprises a plurality of electrically isolated conductive regions selectively separated by regions of a the first surface of said the supporting medium or a first surface of said the dielectric medium.
19. (Currently Amended) The touchpad as claimed in claim 18, wherein the separations between said the conductive regions are relatively small compared to the width of said the conductive regions, so as to selectively allow capacitive coupling of adjacent regions via said the supporting medium or said the dielectric medium.
20. (Currently Amended) The touchpad as claimed in claim 14, wherein said the further conductive layer is supported by a second surface of said the dielectric medium, said the second surface being in substantially opposed relation to said the first surface of said the dielectric medium.

21. (Currently Amended) The touchpad as claimed in claim 20, wherein said the further conductive layer comprises a plurality of electrically isolated conductive regions separated by regions of said the second surface of said the dielectric medium.

22. (Currently Amended) The touchpad as claimed in claim 21, wherein said the conductive regions on said the first surface of said the dielectric medium and said the conductive regions on said the second surface of said the dielectric medium are registered to each other by virtue of corresponding substantially coterminous areas.

23. (Currently Amended) The touchpad as claimed in claim 21, wherein said the conductive regions on said the first surface of said the dielectric medium and said the conductive regions on said the second surface of said the dielectric medium are registered to each other by virtue of corresponding overlapping non-coterminous areas.

24. (Currently Amended) The touchpad as claimed in claim 22, wherein said the registered regions are capacitively coupled via said the dielectric medium.

25. (Currently Amended) The touchpad as claimed in claim 18, wherein said the conductive regions are substantially rectangular.

26. (Currently Amended) The touchpad as claimed in claim 8, wherein said the conductive layer comprises a plurality of electrically isolated conductive regions selectively separated by regions of said the first surface of said the supporting medium or said the first surface of said the dielectric medium, each conductive region of said plurality of conductive regions being linked by one or more conductive bridges to adjacent conductive regions, said conductive the bridges having a width substantially smaller than the width of said the conductive regions.

27. (Currently Amended) The touchpad as claimed in claim 26, wherein said the conductive regions have a relatively large thickness and said the conductive bridges have a relatively small thickness to increase the resistance in said the conductive layer.

28. (Currently Amended) The touchpad as claimed in claim 1, wherein said the supporting medium and said conductive medium are formed as a single conductive support and sensing layer.

29. (Currently Amended) The touchpad as claimed in claim 28, wherein said the single conductive support and sensing layer is formed from a bulk doped medium having a bulk conductivity.

30. (Currently Amended) The touchpad as claimed in claim 29, wherein said ~~the~~ bulk doped medium is glass or plastic comprising a dopant of conductive material.

31. (Currently Amended) The touchpad as claimed in claim 30, wherein said ~~the~~ conductive material is selectively particulate or fibrous.

32. (Currently Amended) The touchpad as claimed in claim 31, wherein said ~~the~~ particulates may be selectively formed from metal or metal oxides with a size up to 10 microns wide.

33. (Currently Amended) The touchpad as claimed in claim 31, wherein said ~~the~~ fibrous material may be selectively formed from nanotubes or carbon fibers with a length up to 10 millimeters.

34. (Currently Amended) The touchpad as claimed in claim 28, wherein said ~~the~~ plurality of conductors are substantially contained within said ~~the~~ single conductive support and sensing layer.

35. (Currently Amended) The touchpad as claimed in claim 1, wherein said ~~the~~ plurality of conductors are each electrically insulated.

36. (Currently Amended) The touchpad as claimed in claim 35, wherein each conductor of said plurality of conductors is coated with an electrically insulating sheath.

37. (Currently Amended) The touchpad as claimed in claim 28, wherein said the conductive support and sensing layer has a textured surface in the form of surface distortions for the redirection of a point of touch.

38. (Currently Amended) The touchpad as claimed in claim 1, wherein said the touchpad is arranged into a non-planar configuration.

39. (Currently Amended) The touchpad as claimed in claim 1, wherein said the touchpad is resilient.

40. (Currently Amended) The touchpad as claimed in claim 1, wherein said the touchpad is deformable.

41. (Currently Amended) The touchpad as claimed in claim 1, wherein said the conducting medium is selectively Indium Tin Oxide (ITO) or Antimony Tin Oxide (ATO).

42. (Currently Amended) A touchpad system including a touchpad as claimed in claim 1 including a sensing circuit comprising a touch detector circuit and a wake up circuit, said

~~the~~ sensing circuit periodically sleeping and waking to measure the state of said ~~the~~ touchpad, wherein in response to a touch, said ~~the~~ sensing circuit wakes up, if sleeping, and scans the surface to determine the touch position.

43. (Original) The touchpad system as claimed in claim 42, wherein the touch is detected in less than about 3 microseconds.

44. (Currently Amended) The touchpad system as claimed in claim 42, wherein the power consumption of said ~~the~~ sensing circuit is less than about 10 microamps when sleeping.

45. (Currently Amended) The touchpad as claimed in claim 1 wherein said ~~the~~ plurality of conductors comprises a first series of spaced-apart conductors and a second series of spaced apart conductors disposed in intersecting relation.